

```
ConjugacyClasses [G_Symbol] :=  
Module [ {sea = Range@Ord@G, ccs = {}, cc},  
While [Length@sea > 0,  
  cc =  
    Union [  
      Table [m [G, inv [G,  $\alpha$ ], m [G, First@sea,  $\alpha$ ]],  
        { $\alpha$ , Ord@G}]];  
  AppendTo [ccs, cc];  
  sea = Complement [sea, cc];  
]; ccs]
```